



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,466	10/17/2003	Rainer Bruns	CH-7973/LeA 36,310	3054

34947 7590 04/11/2006

LANXESS CORPORATION
111 RIDC PARK WEST DRIVE
PITTSBURGH, PA 15275-1112

EXAMINER

ARNOLD, ERNST V

ART UNIT PAPER NUMBER

1616

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/688,466	Applicant(s) BRUNS ET AL.	
	Examiner Ernst V. Arnold	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

The Examiner acknowledges receipt of remarks filed on 01/09/2006. Applicant has cancelled claim 2 and amended claims 1, 4, 5, 6, 7 and 10. Applicant's amendment of the claims has necessitated the new grounds of rejection. Claims 1 and 3-10 are pending in the application. Claims 1 and 3-10 stand rejected for the reasons of record and those stated below.

Applicant is advised that the standard/conventional Markush language is "selected from the group consisting of ... and ...".

Applicant's amendment of instant claim 6 renders the 35 USC 112, second paragraph rejection moot and the Examiner withdraws the rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 8 and 9 remain rejected under 35 U.S.C. 102(b) as being anticipated by Tateishi et al. (EP0677246).

Instant claim 1 is drawn to a compound mixture comprising ipconazole and at least one further fungicidally active compound.

Tateishi et al. provide a fungicidal composition designed to target microorganisms having resistance to benzimidazole fungicides. The fungicidal composition of Tateishi et al. contains at least one fungicidal compound selected from the group consisting of benomyl, cypendazole, carbendazim, EBC, thiabendazole, fuberidazole, dimetbenzazol, thiophanate methyl and thiophanate with ipconazole thus meeting the limitations of instant claim 1 (See: Abstract and page 7, claim 1). Tateishi et al. disclose that the composition can be mixed with other fungicides to prevent pathogenic crop disease in a wider range (Page 4, lines 34-36). Tateishi et al. disclose that triflumizole, an imidazole class fungicide, can be used in the composition (Page 4, line 37). In Example 3, Tateishi et al. prepare a suspension concentrate that contains ethylene glycol. Ethylene glycol has been regulated since 1988 as a pesticide as per the Federal Insecticide, Fungicide and Rodenticide Act therefore meeting the limitations of instant claims 4, 8 and 9 (See: reference U on the previous PTO-892).

Response to arguments:

Applicant removed benzimidazoles from the limitation of instant claim 1 to overcome the art rejection over Tateishi et al. (EP0677246). Applicant distinguishes between imidazoles and benzimidazoles in the instant specification page 3 lines 10-16. However, Tateishi et al. disclose the addition of other fungicides in the composition and specifically point out the triflumazole, which is in the imidazole class of fungicides thus meeting the limitations of instant claims 1, 4, 8 and 9.

Claim Rejections - 35 USC § 102

Claims 1 and 3-10 remain/are rejected under 35 U.S.C. 102(b) as being anticipated by Schelberger et al. (U.S. Patent No. 6,369,090).

Schelberger et al. provide fungicidal mixtures that comprises the active components: a) (I) a carbamate or the oxime ether carboxamide and b) (II) a morpholine derivative and c) (III) an azole fungicide and a preferred azole is ipconazole (Column 5, lines 25-35; Column 9, lines 28-29; and claim 1) thus reading on instant claims 1, 2 and 4. The composition of Schelberger et al. can have the active component (I) and the active component (II) present in a weight ration of from 10:1 to 0.01 to 1 (Claim 3). The composition of Schelberger et al. can have the active component (I) and the active component (III) present in a weight ration of from 10:1 to 0.01 to 1 thus within the range of instant claim 3 (Claim 4). Schelberger et al. expressly state that the fungicidal mixtures can be used in the protection of materials (eg. In the protection of wood) (Column 12, lines 21-23) anticipating instant claims 5-7 and 10. The fungicidal composition of Shelberger et al. can contain further active ingredients such as herbicides, growth-regulating ingredients or fertilizers (Column 11, lines 50-56). The fungicidal composition can be formulated as a spray solution, powders and suspensions or in the form of highly concentrated aqueous, oily or other suspensions, dispersions, emulsions, oil dispersions, pastes, dusts, materials for broadcasting or granules (Column 12, lines 57-63). Solid or liquid carriers for the compositions are anticipated (Claims 5 and 6). Schelberger et al. provide a formulation comprised of the active ingredients in a 10% emulsion in a mixture of 63% by weight of cyclohexonone and 27%

Art Unit: 1616

by weight of emulsifier and diluted with water to the desired concentration (Column 13, lines 53-57) thus anticipating instant claims 8 and 9.

The reference of Schelberger et al. is deemed to meet the limitations of instant claims 1 and 3-10.

Response to arguments:

Applicant argued that Schelberger et al. inherently teach away from combinations that do not contain each of compounds I, II and III because Schelberger et al. teach against combinations of compounds that do not contain each and every component disclosed and the instantly amended claims describe a combination containing only 2 components. The Examiner respectfully disagrees because instant claim 1 is drawn to an active compound mixture comprising a) ipconazole and b) at least one further fungicidally active compound. The claim language allows for more than one fungicidally active compound. For this reason, the rejection over Schelberger et al. is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-10 remain/are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateishi et al. (EP0677246) in view of Arahira et al. (EP0341954).

The reference of Tateishi et al. is described in detail above and that discussion is hereby incorporated by reference.

Tateishi et al. do not expressly disclose the intended use of applying the fungicidal composition to industrial materials including wood, woodbased materials, plastics, cooling lubricants and coating systems, such as paints, varnishes or plaster.

Ahahira et al. disclose the use of biocidal compositions that contain an azole derivative (for example, ipconazole) for preventing deterioration of industrial materials including paper, lumber, leather, paints, plastics, metals and inorganic materials and products formed by such materials (See: Abstract; page 2, lines 3, 29-33 42-43; page 3, lines 17-22 and claims 1-4, for example).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the fungicidal composition of Tateishi et al. for the purpose of protecting industrial materials as disclosed by Ahahira et al. to produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because the number of benzimidazole resistant microorganisms is growing and the composition of Tateishi et al. is effective against benzimidazole resistant microorganisms. By increasing the lifetime of the industrial material, a beneficial cost savings is earned by decreasing the frequency of replacement of the material.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the claimed invention, as a whole, would have been prima facie

Art Unit: 1616

obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the combined teachings of the cited references.

Response to Arguments:

Applicant asserted that Tateishi et al. is not analogous art because Tateishi et al. is directed to a fungicidal composition for agriculture and horticulture use and one of ordinary skill in the art would understand that application of microbiocides to plants and industrial materials are quite different. Applicant further asserted that microbiocides for use in agricultural applications must be effective at physiological pH, biodegradable and not have herbicidal activity for either plant or other vegetation and therefore one of ordinary skill in the art would not have been motivated to look to the teaching of Tateishi et al. to develop a microbiocide for use on technical material.

It is the Examiner's position that forestry is an agricultural industry and protection of wood and wood based products, for example lumber, from destruction by microorganisms is motivation for one of ordinary skill in the art to seek out microbiocidal formulations suitable for that purpose.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. WO 96/27290 teaches a fungicidal mixture of an oxazolidinedione and triazoles (ipconazole). WO 98/3382 teaches a fungicidal composition comprising at least 2 components wherein the mole ratio of component 1 to

Art Unit: 1616

component 2 (ipconazole) is from about 15:1 to 1:15 and a third component, which is at least one of a surfactant, a solid diluent or a liquid diluent.

Claims 1 and 3-10 remain rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone

Art Unit: 1616

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EVA



JOHN PAK
PRIMARY EXAMINER
GROUP 1600